D R A F T [redacted] 25X1
24 February 1970

MEMORANDUM FOR THE RECORD

SUBJECT: Response to "IEG Comments on TSSG Color Study [redacted] 25X1

Following are my comments related by paragraph number in [redacted] 25X1

Paragraph 2 - Belief that "color will never replace B&W and that it will be used only for those situations where colors themselves can impart information of intelligence value "seems to be contradictory within itself. Technically, improved color products may come so close to B&W as to make the difference in "intelligence value" negligible. Furthermore, green-layer extraction of detail ~~could~~ may be able to overcome any residual difference. Finally, the extra dimension of color, supported by a comprehensive R&D program for enhancement of color's intelligence values, may push the value of B&W behind that of color film, and permit us to standardize on color products. Presumably [redacted] 25X1 internal R&D on these films is based on the real likelihood of such happening--as developed through NRO and other contacts.

Paragraph 3 - Because of the inevitable cycle and time-frame of significant R&D, a comprehensive attack on the questions already surfaced regarding use of color products must begin ASAP to place us in a position to properly exploit color film in a production sense when large volumes of such film are here--whether FY-74 or earlier (?).

Paragraph 4b - Intelligence Value of Color - Does IEG have sufficient manpower and funds to carry out such a program?

Paragraph 4c - Color Control Cell - I accept the idea of "one cell" and "in TSSG." In regard to TIMING, the actual human factors tests must be preceded by engineering assessment of existing optics, illumination, etc.--and correlation with the theoretical effects on the human eye and brain, so that a realistic test plan can be drawn up.

If by "precise work", IEG is referring to precise color identification, the idea of magnified direct viewing is being considered; however, scientific study of the problem may indicate that there are too many variables concerning human visual color assessment, such as, to make the use of photo-electric or other "machine" techniques preferable. As to "less precise work not requiring modification of equipment," we will only arrive at such a conclusion by experimentation with equipment having "modifiable" illumination (at the very least).

Paragraph 4e - Color Mensuration - It appears that IEG wishes to take over the role of Mensuration Research. Why differentiate this type of R&D from any other? Again, do they have the man-power to conduct such research and can it be conducted without the special expertise of contractors in this field? Presumably, such R&D will be accompanied by the design and fabrication of appropriate ~~breadboards~~ hardware with which to analyze the problems. How, but through contractual arrangements, can this be done?

Paragraph 5d - IEG states that a "strong spirit of cooperation with collateral analysts is necessary," however, there is no mention (either for or against) concerning TSSG's belief that strong interaction with the All-source Analysts must be developed to insure that the proper techniques of identifying and communicating Color Signatures will lead to fully effective use of color film information by Executive management levels.

Paragraph 5e - One cannot assume that contractual services will not be needed to collect ground truth and provide systems analysis guidance for such a program.

Paragraph 5g - The need for a "senior NPIC Officer" is concurred with--not only to properly select mission targets; but also to obtain significant and appropriate reaction to NPIC's efforts to establish systematic exploitation of color film.

[redacted]

25X1

Project Monitor